Friday, February 10th, 2017

SBI3U1 – Ms. Khan

Today we'll be doing some online activities on Karyotyping. You'll see 2 fabulous educational websites that have lots of activities, quizzes, and information about genetics:

-Learn.Genetics from the University of Utah

-The Biology Project from the University of Arizona

Please save this document with your name in the title, type in your answers for each section, save & send it to me: [rubina.khan@tdsb.on.ca](mailto:rubina.khan@tdsb.on.ca)!

**1. Comparing Mitosis & Meiosis**

Here is a great side-by-side comparison of Mitosis and Meiosis. There are detailed explanations of what happens at each phase, which you may or may want to read. Click on “Launch Interactive”:

<http://www.pbs.org/wgbh/nova/body/how-cells-divide.html>

**\*\*Make a list of 5 differences between mitosis and meiosis.\*\***

|  |  |
| --- | --- |
| Mitosis: | Meiosis: |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

**2. Make a Karyotype:**

Thank goodness for technology! Instead of having to cut and match up all 46 (or sometimes more) chromosomes in a karyotype, you can drag & drop.

Try this activity first:

<http://learn.genetics.utah.edu/content/basics/karyotype/>

**\*\*Is this individual male or female?.\*\***

**3. Looking at Abnormal Karyotypes:**

In this activity, you will be completing karyotypes for 3 individuals and analyzing each one for abnormalities. You don't even have to drag & drop this time...just one click to place the chromosome in the karyotype! Read the introduction & then click on “Patient Histories”.

Go to: <http://www.biology.arizona.edu/human_bio/activities/karyotyping/karyotyping.html>

**\*\*Answer questions A1, A2, B1, B2, C1 and C2.\*\***

A1:

A2:

B1:

B2:

C1:

C2: